



PTO/SB/08A (08-03)

Approved for use through 07/31/2006. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet

1

of

3

Complete if Known

Application Number	
Filing Date	11-03-2003
First Named Inventor	James R. Crawford
Art Unit	
Examiner Name	

Attorney Docket Number C03209US (71768.2C2)

U. S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Document Number Number-Kind Code ² (# known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
AM		US- 712,486	11-04-1902	Black	
		US- 712,487	11-04-1902	Black	
		US- 712,488	11-04-1902	Black	
		US- 712,901	11-04-1902	Black	
		US- 879,822	02-18-1908	Karns	
		US- 1,281,756	10-15-1918	Black	
		US- 1,801,294	04-21-1931	Sutton	
		US- 1,913,365	06-13-1933	Bailey	
		US- 2,887,118	05-19-1959	Loeffler et al.	
		US- 3,056,155	10-02-1962	Harmes	
		US- 3,089,434	05-14-1963	Andreasen	
		US- 3,379,027	04-23-1968	Mowell et al.	
		US- 3,402,777	09-24-1968	Watson	
		US- 3,467,196	09-16-1969	Kinsman	
		US- 3,495,546	02-17-1970	Brown et al.	
		US- 3,525,401	08-25-1970	Hanson et al.	
		US- 3,763,896	10-09-1973	Horne et al.	
		US- 3,729,057	04-24-1973	Werner	
NN		US- 3,827,487	4,073,302	Jackson et al.	

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Foreign Patent Document Country Code ³ -Number ⁴ -Kind Code ⁵ (# known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T*
NN		0187599	07-16-1986	Wittrisch		
		894117	04-18-1962	Mooney		
		1132503	11-06-1968	Esso Production Res		
		402128094A	5-16-1990	Negishi		
		05161884	06-29-1993			
NN		94/23174	10-13-1994	Stoltz		

Examiner Signature	Date Considered
<i>[Signature]</i>	4/26/05

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 801.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.



PTO/SB/08A (08-03)
Approved for use through 07/31/2006, OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

SERIAL NUMBER 1449/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet

2 of 3

Complete if Known

Application Number	
Filing Date	11-03-2003
First Named Inventor	James R. Crawford
Art Unit	
Examiner Name	

Attorney Docket Number C03209US (71768.2C2)

U. S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
MA	US-4,073,302		894117	Jones	
	US-4,360,290		11-23-1982	Ward	
	US-4,585,061		04-29-1986	Lyons, Jr. et al.	
	US-4,729,429		03-08-1988	Wittrisch	
	US-4,756,510		07-12-1988	Klamm et al.	
	US-4,852,391		08-01-1989	Ruch et al.	
	US-4,919,204		04-24-1990	Baker et al.	
	US-4,941,773		07-17-1990	Vergouw	
	US-5,069,285		12-03-1991	Nuckols	
	US-5,180,009		01-19-1993	Sneed	
	US-5,188,174		02-23-1993	Anderson, Jr. et al.	
	US-5,208,936		05-11-1993	Campbell	
	US-5,209,304		05-11-1993	Nice	
	US-5,309,990		05-10-1994	Lance	
	US-5,309,993		05-10-1994	Coon et al.	
	US-5,316,094		05-31-1994	Pringle	
	US-5,355,950		10-18-1994	Zwart	
	US-5,429,194		07-04-1995	Nice	
~~	US-5,445,224		08-29-1995	Comeaux	

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T*
		Country Code ³ -Number ⁴ -Kind Code ⁵ (if known)				
~~~	96/34173		10-31-1996	Murray		

Examiner Signature	<i>[Signature]</i>	Date Considered	4/26/05
--------------------	--------------------	-----------------	---------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹Applicant's unique citation designation number (optional). ²See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.



PTO/SB/08A (08-03)

Approved for use through 07/31/2006. OMB 0651-0031  
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

See instructions for form 1449/PTO

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet 3 of 3 Attorney Docket Number C03209US (71768.2C2)

**Complete if Known**

Application Number	
Filing Date	11-03-2003
First Named Inventor	James R. Crawford
Art Unit	
Examiner Name	

U. S. PATENT DOCUMENTS				
Examiner Initials*	Cite No. ¹	Document Number Number-Kind Code ² ( <i>If known</i> )	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document
		US- 5,447,200	09-05-1995	Dedora et al.
		US- 5,494,103	02-27-1996	Surjaatmadja et al.
		US- 5,497,807	03-12-1996	Rogers
		US- 5,566,764	10-22-1996	Elliston
		US- 5,692,563	12-02-1997	Krueger et al.
		US- 5,695,009	12-09-1997	Hipp
		US- 5,704,393	01-06-1998	Connell et al.
		US- 5,992,250	11-30-1999	Kluth et al.
		US- 6,250,387	06-26-2001	Carmichael et al.
		US- 6,260,617	07-17-2001	Baugh
		US- 6,315,498	11-13-2001	Baugh et al.
		US- 6,343,657	02-05-2002	Baugh et al.
		US- 6,561,280	05-13-2003	Baugh et al.
		US- 6,651,744	11-25-2003	Crawford
		US-		

## FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Foreign Patent Document Country Code ³ Number ⁴ Kind Code ⁵ ( <i>If known</i> )	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T ⁶

Examiner Signature  Date Considered 1/26/05

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹Applicant's unique citation designation number (optional). ²See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.88. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.